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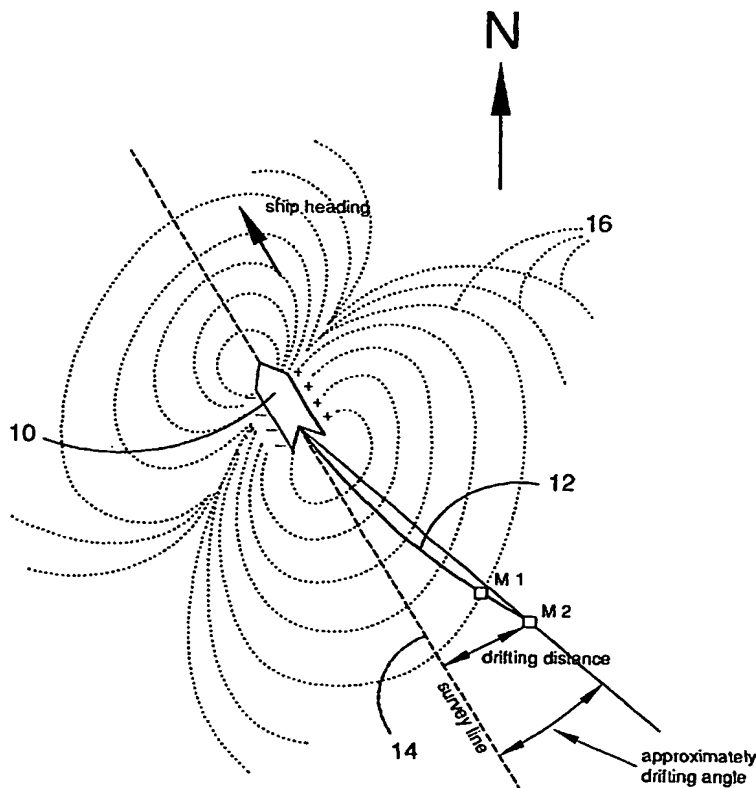
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(54) Title: METHOD OF PROCESSING MARINE MAGNETIC GRADIENT DATA AND EXPLORATION METHODS USING THAT DATA



(57) Abstract: A method of processing marine magnetic data is disclosed which comprises towing first and second magnetometers  $M_1$  and  $M_2$  behind a ship (10). Raw magnetic gradient data is obtained from the sensors and the trend of the gradient of the ship bias detected by the sensors determined. The method includes subtracting the trend from the raw magnetic gradient data to obtain corrected gradient data, and processing the corrected gradient data to provide a data output.



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